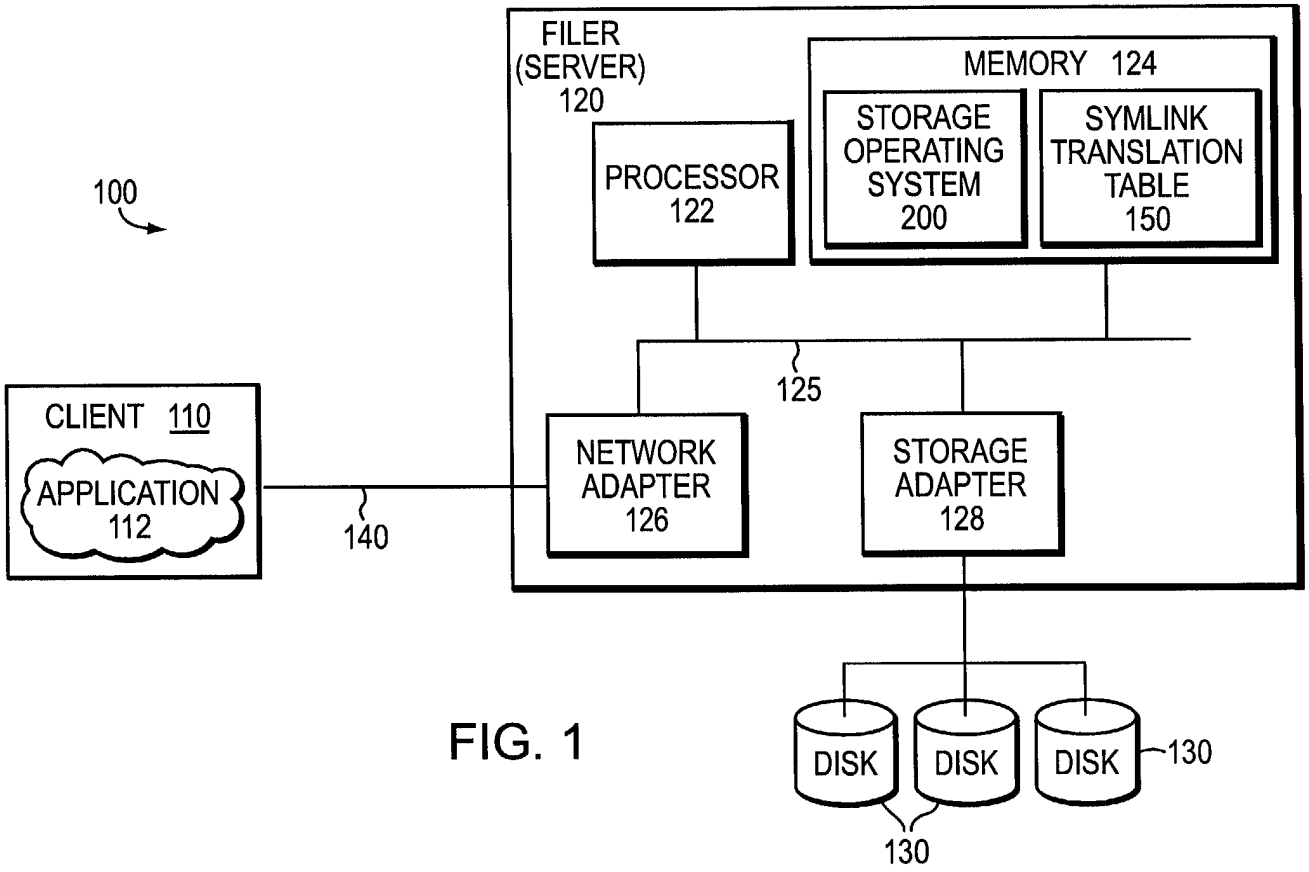
100
FILER
(SERVER)
120
PROCESSOR
122
MEMORY 124
STORAGE
OPERATING
SYSTEM
200
SYMLINK
TRANSLATION
TABLE
150
125
CLIENT 110
APPLICATION
112
140
NETWORK
ADAPTER
126
STORAGE
ADAPTER
128
DISK
DISK
DISK
130
130

FIG. 1

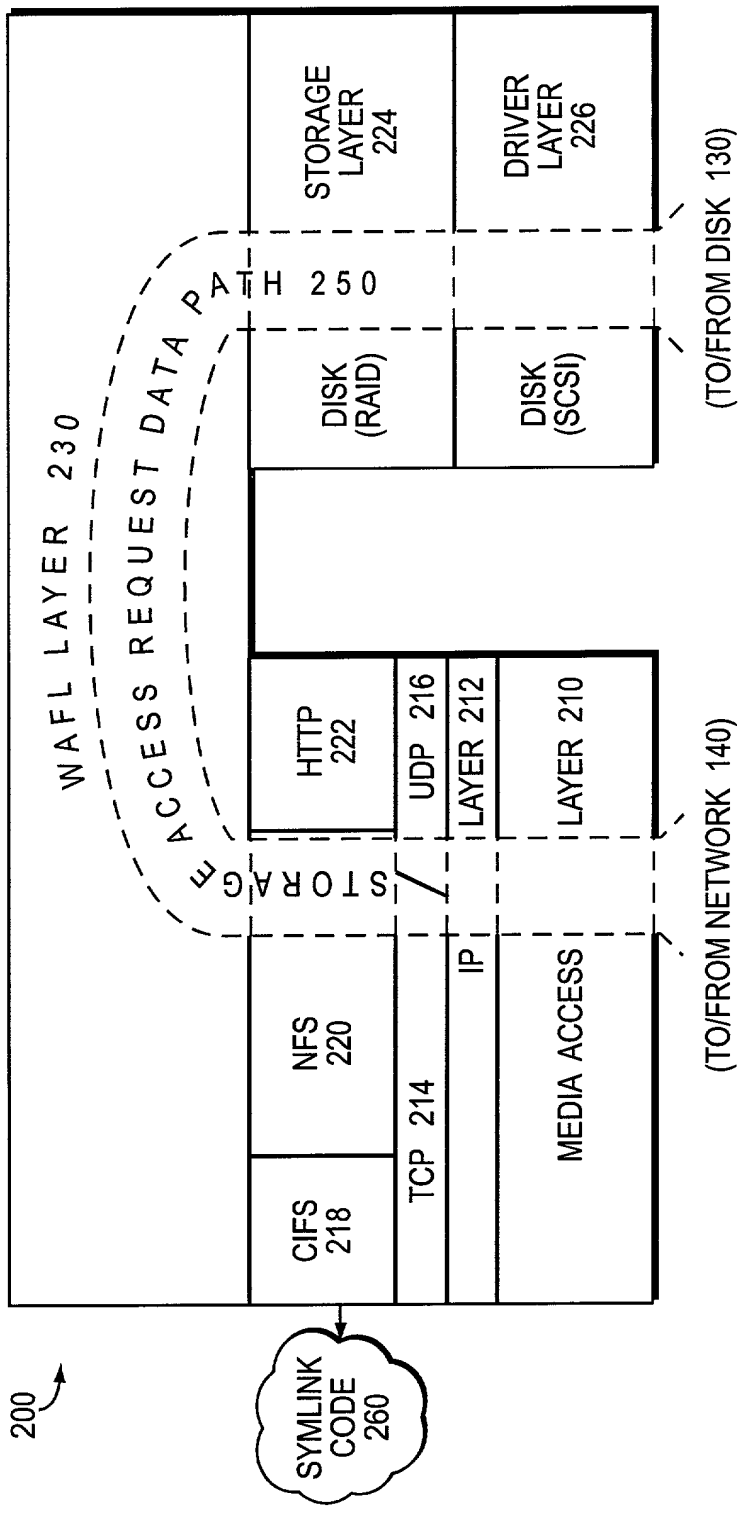
200
SYMLINK CODE 260
WAFL LAYER 230
ACCESS REQUEST DATA PATH 250
STORAGE
CIFS 218
NFS 220
TCP 214
IP
MEDIA ACCESS
(TO/FROM NETWORK 140)
HTTP 222
UDP 216
LAYER 212
LAYER 210
STORAGE LAYER 224
DRIVER LAYER 226
DISK (RAID)
DISK (SCSI)
(TO/FROM DISK 130)

FIG. 2

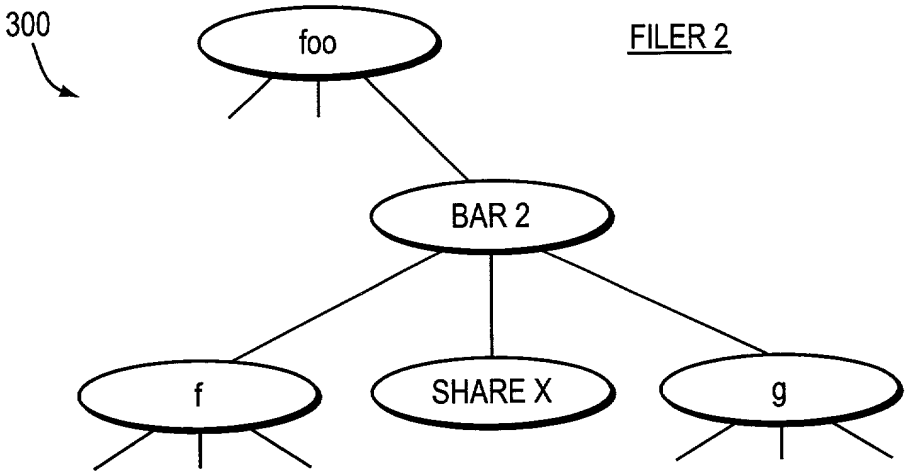
300
foo
FILER 2
BAR 2
f
SHARE X
g

FIG. 3

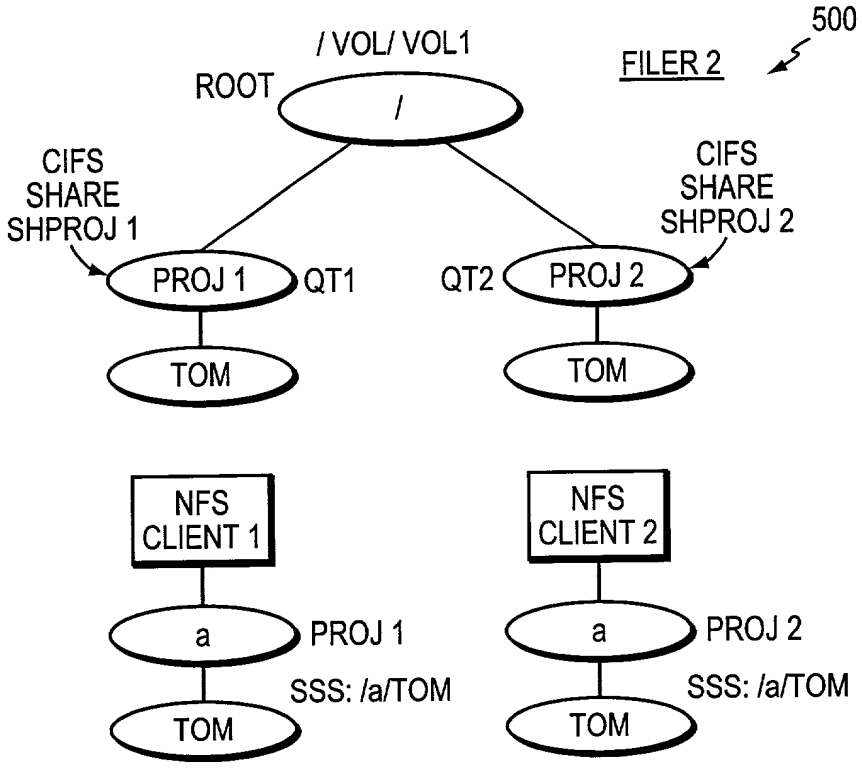
500
/ VOL/ VOL1
FILER 2
ROOT
/
CIFS
SHARE
SHPROJ 1
CIFS
SHARE
SHPROJ 2
PROJ 1
QT1
QT2
PROJ 2
TOM
TOM
NFS
CLIENT 1
NFS
CLIENT 2
a
PROJ 1
SSS: /a/TOM
a
PROJ 2
SSS: /a/TOM
TOM
TOM

FIG. 5

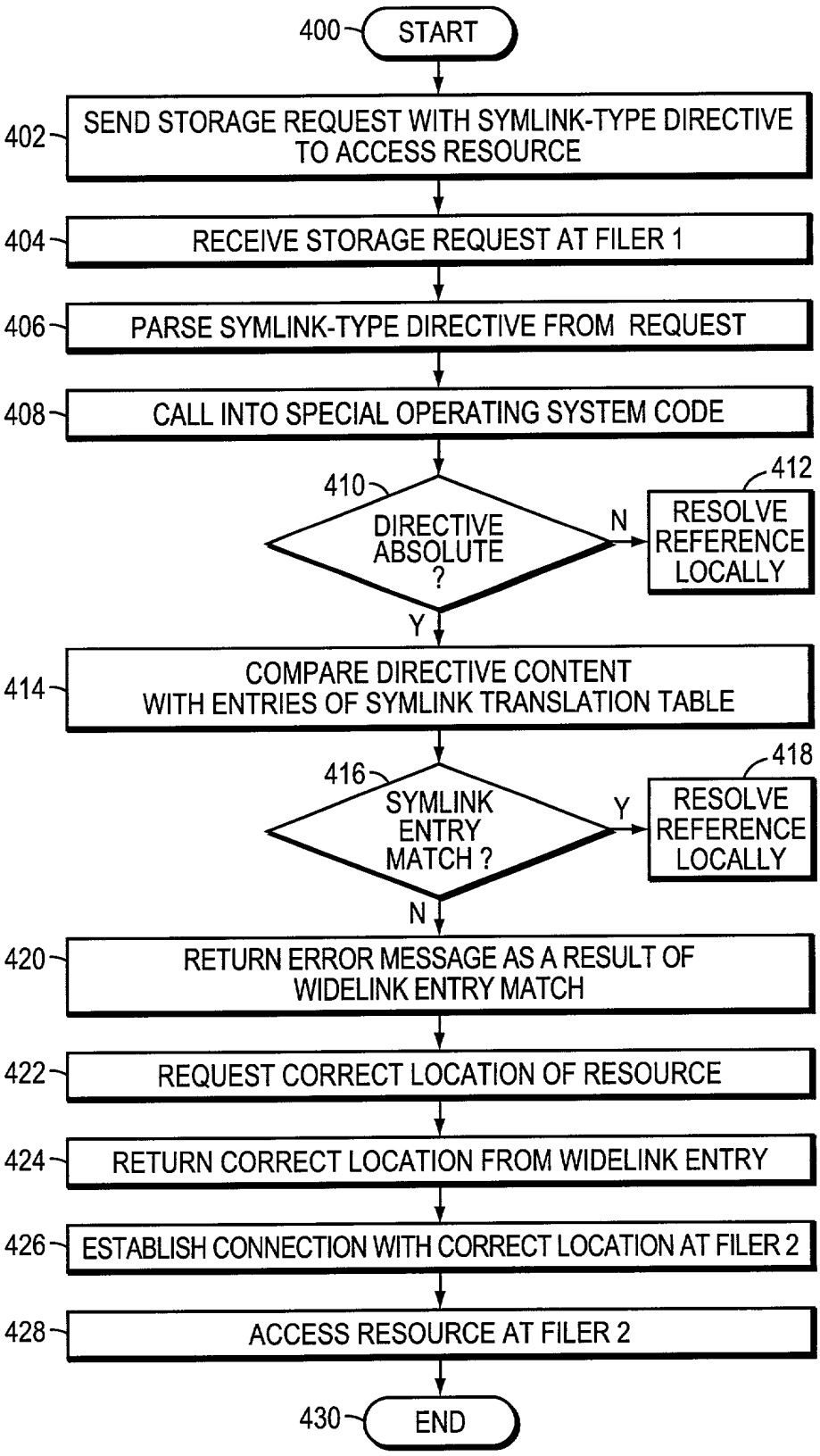
400
START
402
SEND STORAGE REQUEST WITH SYMLINK-TYPE DIRECTIVE TO ACCESS RESOURCE
404
RECEIVE STORAGE REQUEST AT FILER 1
406
PARSE SYMLINK-TYPE DIRECTIVE FROM REQUEST
408
CALL INTO SPECIAL OPERATING SYSTEM CODE
410
DIRECTIVE ABSOLUTE ?
N
412
RESOLVE REFERENCE LOCALLY
Y
414
COMPARE DIRECTIVE CONTENT WITH ENTRIES OF SYMLINK TRANSLATION TABLE
416
SYMLINK ENTRY MATCH ?
Y
418
RESOLVE REFERENCE LOCALLY
N
420
RETURN ERROR MESSAGE AS A RESULT OF WIDELINK ENTRY MATCH
422
REQUEST CORRECT LOCATION OF RESOURCE
424
RETURN CORRECT LOCATION FROM WIDELINK ENTRY
426
ESTABLISH CONNECTION WITH CORRECT LOCATION AT FILER 2
428
ACCESS RESOURCE AT FILER 2
430
END

FIG. 4